

swim pretty rapidly, with a constant rotation upon their longitudinal axis.

The development of the embryo takes place by a gradual widening of the hinder part, which thus acquires a bell-like form, the stomach becomes much larger, and the oral orifice, which was depressed in the embryo, becomes considerably protruded. On the third day, the hinder margin of the bell-shaped umbrella exhibits eight small rounded lobes, at the same time that eight corresponding appendicular sacs are developed from the stomach. Shortly afterwards the marginal lobes increase considerably in length, and acquire a somewhat quadrangular form, with their margins slightly indented; and at these indentations the rudiments of the marginal corpuscles (*ocelli*) make their appearance. At this stage the mouth has become much larger, and makes its appearance at the extremity of a short tubular process,—the rudimentary stalk of the four arms possessed by the perfect animal. The motion of the young animal through the water is slower than at first; but it is still principally effected by the action of cilia, although the umbrella occasionally expands and contracts, producing an undulation of the marginal lobes.

The further progress of the young *Medusa* to the condition in which Dr. Krohn first observed it, consists in the growth of the marginal lobes, and especially of the lappets into which they are divided by the central indentation, the disappearance of the cilia, the appearance of crystalline bodies in the marginal corpuscles, the greater development of the base of the oral tentacles, and the diminution of the height of the umbrella. At this period also the whitish coat of the embryo disappears, whilst the urticating organs are developed.

The author followed the further development of the young *Pelagia* until it had acquired the eight additional ventricular sacs characteristic of the mature animal and the eight marginal tentacles; but he observes, that four of these had attained a length equal to the diameter of the disk, whilst the other four were still rudimentary. The stalk of the oral arms was longer and larger, but the arms themselves were but slightly developed.—W. S. DALLAS.

DESCRIPTION OF A NEW SPECIES OF SWIFT.

CYPSELUS GALILÆENSIS, Antinori.

C. cauda brevissima, subfurcata: corpore nigro-virescente, nitore metallico perlucido: fronte dilute albida: gula et regione supra-caudali albis: pognio externo primæ remigis albo limbato.

The third part of last year's 'Naumannia' contains a communication from the Marchese Oratio Antinori, describing this "apparently new Swift," which was discovered by him in Palestine, on the borders of the Sea of Galilee. Two specimens were procured,—*Cypselus apus* and *C. melba*; and *Hirundo daurica, rupestris* and *rustica* were breeding abundantly near the same locality. Its similarity to a South African species (*C. leucorrhous*, Steph. ex LeVaill. Ois. d'Afr. pl. 244. fig. 2) is commented upon; but it is hardly probable that it

should be identical with a bird from so different a country. The Indian species that approaches it most nearly is *C. leuconyx*, Blyth; but it appears distinct from that and all other Asiatic species with which we are acquainted. The zoology of the Holy Land—especially 1st ornithology—is, in fact, very little known; and it is much to be wished that, amongst the crowds of English who yearly visit that country, some would turn their attention to this interesting but neglected subject.—P. L. S.

METEOROLOGICAL OBSERVATIONS FOR JAN. 1856.

Chiswick.—January 1. Overcast: cloudy. 2. Foggy: exceedingly fine: slight rain. 3. Fine: uniformly overcast: fine. 4. Cloudy and mild: overcast: rain at night. 5. Rain: densely overcast: rain. 6. Cloudy: rain. 7. Cloudy: foggy: cloudy. 8. Densely overcast: cloudy and cold. 9. Drizzly: rain and sleet: rain at night. 10. Cloudy and cold: clear and frosty. 11. Frosty: cloudy: frosty. 12. Cloudy: sunshine occasionally: cloudy. 13. Clear and frosty: fine. 14. Dry and frosty. 15. Sharp frost: clear: fine. 16. Fine: rain and fog: cloudy. 17. Overcast: cloudy: rain. 18. Slight rain: cloudy. 19. Rain: heavy clouds. 20, 21. Densely overcast: heavy clouds: slight rain. 22. Densely clouded: rain. 23. Low clouds: bright sun at intervals: cloudy and windy. 24. Densely clouded and boisterous: rain: lightning at night. 25. Overcast: fine. 26. Very fine: rain. 27. Fine: frosty. 28. Frosty: overcast: hail-shower: fine. 29. Clear and frosty: fine: sharp frost. 30. Frosty: fine: cloudy and cold: frosty. 31. Clear and frosty: cloudy: frosty.

| | |
|--|-------------|
| Mean temperature of the month | 38°·43 |
| Mean temperature of Jan. 1855 | 33·45 |
| Mean temperature of Jan. for the last thirty years | 36·94 |
| Average amount of rain in Jan. | 1·690 inch. |

Boston.—January 1. Cloudy. 2. Foggy. 3. Fine. 4. Cloudy: rain P.M. 5. Cloudy: rain A.M. 6. Fine. 7. Cloudy. 8. Cloudy: rain P.M. 9, 10. Fine. 11. Fine: snow A.M. 12—16. Fine. 17, 18. Cloudy: rain P.M. 19. Rain A.M. 20. Cloudy: rain P.M. 21. Rain A.M. and P.M. 22. Fine. 23. Rain A.M. 24. Cloudy: rain A.M. 25. Fine. 26. Cloudy: rain A.M. 27. Fine. 28. Fine: rain and snow P.M. 29. Fine. 30, 31. Cloudy.

Sandwick Manse, Orkney.—January 1. Cloudy A.M. and P.M. 2. Damp A.M. and P.M. 3. Cloudy A.M.: damp P.M. 4. Cloudy A.M. and P.M. 5. Damp A.M.: rain P.M. 6. Damp A.M. and P.M. 7. Rain A.M. and P.M. 8. Sleet-showers A.M.: hail-showers P.M. 9. Snow-showers A.M.: clear, frost P.M. 10. Snowing A.M.: snow-showers P.M. 11. Snow-showers A.M.: snow-drift P.M. 12. Bright A.M.: thaw, showers P.M. 13. Cloudy A.M. and P.M. 14. Cloudy A.M.: fine, cloudy P.M. 15. Cloudy, frost A.M.: fine, cloudy P.M. 16. Cloudy A.M.: fine, cloudy P.M. 17. Damp A.M.: rain P.M. 18. Clear A.M.: fine, clear P.M. 19. Frost A.M.: rain P.M. 20. Bright A.M.: hail-showers P.M. 21. Bright, frost A.M.: clear, frost P.M. 22. Clear, frost A.M.: clear P.M. 23. Sleet A.M.: clear, fine P.M. 24. Cloudy A.M.: cloudy, fine P.M. 25. Cloudy A.M.: showers P.M. 26. Showers A.M.: sleet-showers P.M. 27. Clear A.M.: showers P.M. 28. Showers A.M.: snow-showers P.M. 29. Snow-showers A.M. and P.M. 30, 31. Bright A.M.: snow-showers P.M.

| | |
|---|--------------|
| Mean temperature of Jan. for twenty-nine previous years ... | 38°·38 |
| Mean temperature of this month | 38·00 |
| Mean temperature of Jan. 1855 | 38·16 |
| Average quantity of rain in Jan. for fifteen previous years ... | 4·24 inches. |

The remarkable depression of the barometer here on the 23rd, 24th and 25th is worthy of observation, coupled with the fact, that the gale which it indicated did not reach Orkney, or the N. of Scotland, while it was violent in England. The first two of these days were really fine here, and marked so in the Register.